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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,792	03/11/2004	Lloyd W. Rogers JR.	DP-309958	5607
22851	7590	10/02/2006	EXAMINER	
DELPHI TECHNOLOGIES, INC.			STRIMBU, GREGORY J	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			3634	

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/798,792	Applicant(s) ROGERS ET AL.	
	Examiner Gregory J. Strimbu	Art Unit 3634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 17-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/11/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/2/04 + 4/18/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Applicant's election with traverse of Group I in the reply filed on June 16, 2006 is acknowledged. The traversal is on the ground(s) that the 1) claims represent different aspects of a single invention, 2) the same search is required for both inventions, and 3) the claims having common distinctive features and should therefore be examined together. This is not found persuasive because 1) the claims of the invention of Groups I and II clearly directed to two different statutorily defined classes. The invention of Group I is directed to an apparatus while the invention of Group II is directed to a method. 2) The search required for the invention of Group II requires searching in classes/subclasses that would not need to be searched for the invention of Group I. 3) Although the inventions of Group I and Group II are similar, they are nonetheless directed to separate classes of inventions which would create a burden on the Patent Office if they were to be examined together.

The requirement is still deemed proper and is therefore made FINAL.

Claims 17-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on June 16, 2006.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "40" has been used to designate both a drum of a first

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embodiment as shown in figure 3 and a drum of a second embodiment as shown in figure 6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "58" on line 16 of page 9. It appears that one of the tensioners 56 in figure 4 should be labeled "58". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because "a cable" on line 9 is confusing since it is unclear if the applicant is referring to the cable set forth above or is attempting to set forth another cable in addition to the cable set forth above. On line 11, "portion position" appears to be a typographical error. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: on line 8 of page 1, the serial number and the status of the applicant's copending application should be provided; on line 26 of page 8, it appears that "34" should be changed to --36--; on lines 19-20 of page 13, "as 38 and 29 as hinge assembly 28" is grammatically awkward and confusing; on line 17 of page 14, "is achievement" is grammatically awkward and confusing; lines 28-32 of page 14 are confusing since it is unclear what the applicant is attempting to set forth.

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. It is suggested the applicant amend the title to include the hinge of the invention and remove the reference to the non-elected method.

Claim Rejections - 35 USC § 112

Claims 1-16 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitations such as “being configured to make contact with a portion of a cable” on line 12 of claim 1 render the claims indefinite because it is unclear if the cable comprises part of the invention or is merely intended to be used with the invention. Recitations such as “when said second hinge portion . . . with respect to said first hinge portion” on lines 13-14 of claim 1 render the claims indefinite because it is unclear if the guide surface is configured to make contact with the cable when the second hinge portion is in a first orientation with respect to the first hinge portion or if the end of the cable is secured to the cable attachment when the second hinge portion is in a first orientation with respect to the first hinge portion. Recitations such as “with respect to said first hinge portion position” on line 14 of claim 1 render the claims indefinite because it is unclear what the applicant is attempting to set forth. Recitations such as “said first hinge assembly” on line 2 of claim 2 render the claims indefinite because they lack antecedent basis. Recitations such as “the other end of said cable is coupled to the drive unit” on lines 1-2 of claim 5 render the claims indefinite because it is unclear if the applicant is claiming the subcombination of a hinge assembly or claiming the combination of a hinge assembly and a drive unit. The preamble of claim 1 implies the subcombination while the positive recitation of the drive unit implies the combination. Recitations such as “at one end” on line 2 of claim 8 render the claims indefinite

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because it is unclear what element of the invention has the end to which the applicant is referring. Recitations such as "a second orientation" on line 19 of claim 8 render the claims indefinite because it is unclear if the applicant is referring to the second orientation set forth above or is attempting to set forth another orientation in addition to the one set forth above. Recitations such as "is configured to provide a lower track of the sliding door" on lines 1-2 of claim 12 render the claims indefinite because it is unclear what the applicant is attempting to set forth. How does the guide track provide another guide track? Recitations such as "said motor" on line 2 of claim 14 and "said cable drum" on line 3 of claim 14 render the claims indefinite because they lack antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimura. Shimura discloses a hinge assembly 35, 39a, 39b for coupling a sliding door 2 of a vehicle 1 to a drive unit 10 for sliding the sliding door from an open position to a closed position, the drive unit causing the hinge assembly to slide within a guide track 5 as the door moves between the open position and the closed position, the hinge assembly comprising: a first hinge portion 35, 39a; a second hinge portion 39b, said first

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hinge portion being pivotally secured to said second hinge portion; a cable attachment 36 being secured to said second hinge portion; and a guide surface 36a disposed on a surface of said first hinge portion, said guide surface being configured to make contact with a portion of a cable 12b having an end 12d secured to said cable attachment when said second hinge portion is in a first orientation (as shown in figure 18) with respect to said first hinge portion position and said cable 12b no longer makes contact with said guide surface as said second hinge portion moves from said first orientation to a second orientation (as shown in figure 14) with respect to said first hinge portion, a pivot pin pivotally connects the first and second hinge portions, rollers 35c.

Claims 8, 11-16 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimura. Shimura discloses a drive assembly for a sliding door 2, comprising: a guide track 5 having a curved portion disposed at one end; a hinge assembly 35, 39a, 39b comprising: a first hinge portion 35, 39a, a second hinge portion 39b, said first hinge portion being pivotally secured to said second hinge portion; a cable attachment 36 being secured to said second hinge portion; and a guide surface 36a disposed on a surface of said first hinge portion, said guide surface being configured to make contact with a portion of a first cable 12b having an end 12d secured to said cable attachment when said second hinge portion is in a first orientation (as shown in figure 18) with respect to said first hinge portion position and said portion of said first cable no longer makes contact with said guide surface as said second hinge portion moves from said first orientation to a second orientation (shown in figure 14) with respect to said first

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hinge portion; a second cable 12a secured to said first hinge portion at one end; and a drive unit 10 for providing a tension to said first cable to cause said first hinge portion to travel within said guide track in a first direction and for providing a tension to said second cable to cause said first hinge portion to travel within said guide track in a second direction; wherein said second hinge portion moves from said first orientation to a second orientation as said first hinge portion travels in said curved portion of said guide track, a motor 13, an electromagnetic clutch (not shown, but see column 4, line 16) for enabling the motor to freely rotate without rotating the drive pulley, a pulley 22 disposed on the curved portion of the guide track 5, wherein a portion of the first cable 12b is directly aligned with the end of the first cable 12d secured to the cable attachment 36 when the first cable no longer makes contact with the guide portion as shown in figure 14.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura as applied to claims 8, 11-16 and 28 above, and further in view of Stone et al. Shimura is silent concerning a drum.

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However, Stone et al. discloses a drive assembly comprising a drum 38 having first and second cables 42 and 44 secured thereto for winding on and winding off the cables from the drum.

It would have been obvious to one of ordinary skill in the art to provide Shimura with a drum, as taught by Stone et al., to reduce the amount of space required for housing the drive assembly.

Allowable Subject Matter

Claim 2 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, absent applicant's own disclosure, fails to teach the entire combination of elements set forth in the claimed invention. Specifically, the prior art of record fails to teach the cable attachment moving closer to the first hinge assembly as the second hinge portion moves from the first orientation to the second orientation. See claim 2, lines 1-3.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fukumoto et al., Mrkovic et al., Moreau, and Boyko et al. are cited for disclosing a sliding door drive assembly.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 571-272-6836. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gregory J. Strimbu
Primary Examiner
Art Unit 3634
September 1, 2006